

ABSTRACT

A musical instrument adapted for string play comprises at least an elongated unitary neck and solid body, one or more support arms releasably or pivotally secured to the unitary neck and body, and one or more side panels releasably or pivotally secured to a support arm. A string tensioning system for tuning the instrument is secured to and spaced apart from the underside of the body portion and is operated in conjunction with a string-path reverser affixed to the proximal end of the body portion. The string-path reverser redirects the strings from the playing surface on the top of the body portion to the tensioning system underneath. Side panels are employed that approximate portions of the sides of the body of a conventional acoustic instrument, and connective means are employed that enable rapid assembly (or expansion) of the instrument for playing and rapid disassembly (or contraction). The components are readily arranged in a small carrying case for storage and transit. When assembled (or expanded) the subject instrument feels and responds like a conventional acoustic instrument. Guitar embodiments of the present invention are described. Acoustoelectric transduction is provided to convert the string vibrations to electrical signals, which are amplified. Electronic signal processing means are employed whereby the effects of the multi-resonant nature of the large hollow body of a conventional acoustic instrument are approximated. Input circuits are provided that enable sounds from other devices such as tape or digital recorders to be superposed with those of the instrument. Output circuits provide signals suitable for amplifier/loudspeaker and for headphone presentation. The latter facilitates "silent" practice. An electronic metronome and an electronic tuning aid are incorporated, and signal processing means are provided whereby the sound heard by a headphone wearing player will appear to emanate directly from the instrument.